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**FINAL
ENVIRONMENTAL
IMPACT STATEMENT**

**For The
EQUITY OIL COMPANY**

**FEDERAL
32-4 & 23-21**

**OIL & GAS
WELLS**



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Forest Service
February 2004



Final Environmental Impact Statement

For The

**Equity Oil Company
Federal 32-4 and 23-21
Oil and Gas Wells**

**Dakota Prairie Grasslands
Medora Ranger District
Golden Valley County,
North Dakota**

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**Equity Oil Company Federal 32-4 and 23-21
Oil and Gas Wells
Surface Use Plan of Operations
Final Environmental Impact Statement**

**Dakota Prairie Grasslands
Medora Ranger District
Golden Valley County
North Dakota**

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Abstract: The Final Environmental Impact Statement (FEIS) summarizes the analysis performed and resulting effects of the proposed implementation of the Surface Use Plan of Operations (SUPO) for the Equity Oil Company's Federal 32-4 and 23-21 oil and gas wells. The FEIS also considers a requested waiver of No Surface Occupancy (NSO) stipulations for one of the two leases associated with this proposal. Both of the proposed well sites are located in the Bell Lake Inventoried Roadless Area (IRA). The SUPO identifies how the lessee proposes to utilize National Forest System (NFS) lands to access and develop their minerals. The Forest Service is required to respond to the submitted SUPOs and determine if they are: consistent with Federal mineral lease stipulations and laws; consistent with the Dakota Prairie Grassland Land and Resource Management Plan; and meet or exceed the surface use requirements of 36 CFR 228.108(a) thru (j). These requirements cover such things as surface resource protection, reclamation, safety measures, containment and treatment of wastes, and watershed protection. A Proposed Action to meet these needs was developed as well as a No Action alternative. Key issues that influenced the development of alternatives were impacts to the Bell Lake Inventoried Roadless Area, and noxious weeds.

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SUMMARY OF THE FINAL ENVIRONMENTAL IMPACT STATEMENT

Introduction

The Final Environmental Impact Statement (FEIS) presents an analysis of the environmental effects of various alternatives on the proposed approval of Surface Use Plan of Operations (SUPO) for the Equity Oil Company (Equity) Federal 32-4 and 23-21 oil and gas wells. A Draft Environmental Impact Statement (DEIS) was completed in February 2004.

The Medora Ranger District of the Dakota Prairie Grasslands (DPG) received two Applications for Permit to Drill (APDs) from the Equity Oil Company (Equity). Equity seeks to drill two oil and gas wells, (32-4 and 23-21) both located on National Forest System (NFS) lands. The Bureau of Land Management (BLM) approves the APD, however, the Forest Service must approve a portion of the APD, called the Surface Plan of Operations (SUPO), before the BLM may approve the APD. A SUPO identifies how the company plans to use the surface for access, drilling operations, production, and eventual reclamation.

If approved, the SUPOs would authorize Equity to construct well pads, access roads, production facilities, pipelines, and utilities. These proposed wells are located on valid federal oil and gas leases, which afford an exclusive right to drill, extract and remove oil and gas resources.

The 32-4 and 23-21 well sites are located in Sections 4 and 21, respectively, T143N, R103W, Golden Valley County, North Dakota. Both well sites are located in the 11,270 acre Bell Lake Inventoried Roadless

Area (IRA), which is the analysis area for this EIS. The Bell Lake IRA is located approximately 16 air miles northeast of Beach, North Dakota.

The DPG Land and Resource Management Plan (LRMP) allocates the Bell Lake IRA to Management Area (MA) 6.1, Rangeland with Broad Resource Emphasis. This MA allows for oil and gas development and the honoring of valid existing oil and gas leases

Purpose and Need for Action

The DPG LRMP identifies oil and gas development as a valid use of the Dakota Prairie Grasslands. The Plan also states that the Forest Service will honor all valid existing oil and gas leases. Therein lies the purpose for this proposed action.

Once a lease is issued and a SUPO submitted, the Forest Service is required to respond to the SUPO, which is the need tied to the proposed action. However, because of the rights associated with a oil and gas lease the Forest Service's role is limited in scope. The Forest Service's responsibility is to determine if the submitted SUPOs are consistent with Federal mineral lease stipulations and laws; are consistent with the DPG LRMP; and meet or exceed the surface use requirements of 36 CFR 228.108(a) thru (j) which includes requirements for such things as surface resource protection, reclamation, safety measures, containment and treatment of wastes, and watershed protection.

Decisions to be Made

The Responsible Official may choose any of the alternatives analyzed in this document, including the No Action alternative or some combination of elements of the action alternatives. The responsible official for this project is the Medora District Ranger. The decision will consider:

- Whether to approve, deny, or modify the two Surface Use Plans of Operations as submitted by Equity Oil Company.
- Whether to approve or deny a No Surface Occupancy (NSO) lease stipulation waiver for lease NDM 89514 (32-4 well).

Public Involvement

Formal public involvement for this project began with the publishing of the “Notice of Intent to prepare an Environmental Impact Statement” which appeared in the Federal Register on December 26, 2002. A scoping letter was mailed on January 31, 2003, to 64 organizations, individuals, Federal, State, and local government agencies. A follow-up scoping letter was mailed on February 4, 2003 because the January 31 scoping letter did not include the project map. The scoping letter provided a summary and map of the Proposed Action, the Purpose and Need for the action, tentative issues and background information.

Scoping notices, which requested comments on the proposed project, were published in the Bismarck Tribune (newspaper of record) on February 4, 2003; The Dickinson Press on February 6, 2003; the McKenzie County Farmer on February 12, 2003; and the Billings County Pioneer on February 13, 2003.

The proposed project was also scoped within the Forest Service through an internal scoping process.

The proposed project had been identified in the DPG National Environmental Policy Act (NEPA) Quarterly Schedule of Proposed Actions, since the First and Second Quarters, January-June, 2003, edition.

Scoping for this project closed on March 7, 2003, a total of seven written comments were received.

The DEIS was released for comment on February 20, 2003. A Notice of Availability was published in the Federal Register on February 27, 2004. A total of thirteen comments were received.

All public comments are available for review in the Project File located at the Medora Ranger District, Dickinson, ND.

Identification of Issues

Analysis of public and internal input received through the scoping process resulted in the identification of the following *Key Issues*, which were used in the development of alternatives.

- The effect of oil and gas development on roadless characteristics of the Bell Lake IRA.
- Introduction and/or spread of noxious weeds in the Bell Lake IRA.

Alternatives

The FEIS has two alternatives. They are the Proposed Action, and the “No Action” alternative.

Alternative 1: (Proposed Action)

Under Alternative 1 the SUPOs for each of the two proposed wells would be approved. This would authorize Equity to:

- Construct a well pad for the 32-4 well approximately 351 by 488 feet. This pad would disturb approximately 3.2 acres of land. The 23-21 well pad would be 445 by 303 feet and would disturb approximately 2.9 acres of land.
- Construct approximately 2,325 feet of access road to the 32-4 well site. This road would become Forest Service Road (FSR) 708-19. A 275 feet long approach road (FSR 708-20) exiting from FSR 708-19 northwest to the 32-4 well pad would also be constructed.
- Construct approximately 4,618 feet of road to access the 23-21 well site. This new road would become Forest Service Road (FSR) 708-1.
- Install a main pumping unit, storage tanks, heater-treater, and gas flaring equipment. Equity would also be allowed to bury pipelines, electric, and communication lines adjacent to the access roads.
- Use herbicides to control any potential infestations of noxious weeds that may appear on the access road or well pad.

Alternative 1 also proposes to approve Equity's request for a NSO lease stipulation waiver. The request is based on a change of MAs (MA 1.31 to 6.1), which occurred between the draft and final DPG LRMP. MA 6.1 doesn't prohibit surface occupancy for oil and gas development. The waiver would nullify the No Surface Occupancy

stipulation for federal lease NDM 89514 which contains the 32-4 well.

Alternative 2: (No Action)

The "No Action" alternative, required by the National Environmental Policy Act (40CFR 1502.14), or NEPA, looks at what would happen in the analysis area if the project did not take place. Using this alternative as a baseline allows the analyst to see how other alternatives compare to it. Under this alternative the well pads, access roads, production facilities, pipelines, electric and communication lines would not be installed.

However, given that the entire IRA is leased for oil and gas development and the fact that highly productive oil and gas wells are located nearby, there is a high probability that lessees will continue to seek to develop their lease rights. Also the owners of the private minerals in the IRA may exercise their right to develop those minerals at any time.

Livestock grazing and range management activities would likely continue at current levels. Motorized use of the existing primitive two-track road system by ranchers, the Forest Service and the recreating public would continue. Recreation would be of a dispersed nature, in a semi-primitive motorized setting. The Scenic Integrity level in the IRA would remain moderate.

Motorized and non-motorized recreation, livestock grazing and administration, and oil exploration would continue to provide means for the dispersal and establishment of noxious weeds and non-native grasses in the analysis area.

Biological control efforts for leafy spurge have been conducted in the IRA since 2001 with effective results. Under this alternative a downward trend of leafy spurge dominated areas over time is expected.

Alternative Comparison

Table 1 below summarizes the response of each alternative to the Purpose and Need for this project. Table 2 provides a comparison of the effects of each alternative by Key Issue.

Table S1. Summary of How the Alternatives Respond to the Purpose and Need

Purpose and Need	Alternative 1 (Proposed Action)	Alternative 2 (No Action)
Consistent with the DPG LRMP direction.	Fulfills the goals, objectives, standards, and guidelines of the DPG LRMP for minerals including reclamation activities. It also allows Equity to exercise their valid existing lease rights to explore and extract oil and gas resources under federal laws.	Not consistent with the DPG LRMP direction in that Equity's existing valid oil and gas lease rights would not be honored. The NSO stipulation waiver for lease NDM 89514 (32-4 well) would not be granted.
SUPO is consistent with the lease, including the lease stipulations and applicable Federal laws.	The proposed wells are in compliance with lease stipulations, and appropriate laws policy and regulations related to oil and gas development on National Forest System lands.	Not consistent with Federal law in that the valid oil and gas lease rights are not honored.
Consistent with 36 CFR 228.108 (a) thru (j) Surface Use Requirements	Both SUPOs by inclusion of the 13 Point Surface Use Plan and Conditions of Approval (COAs) meet or exceed the requirements of 36 CFR 228.108.	No Action would preclude the need for meeting the 36 CFR 228.108 Surface Use Requirements.

Table S2. Comparison of Alternatives by Key Issues.

Roadless Characteristics	Alternative 1 – Proposed Action	Alternative 2 – No Action
Solitude and Serenity	The effects of oil production and maintenance i.e. sound, olfactory or visual will adversely affect the solitude and serenity of an area a quarter mile either side of the access road and a quarter mile around the well pad. Under the right wind conditions effects may carry beyond this area, termed a cherry stem, for short periods of time. Solitude and Serenity would be most affected in Sections 4 and 21, which contain the cherry stems.	Oil and gas activities outside but adjacent to the eastern boundary of IRA may negatively effect the Solitude and Serenity within the IRA.
Natural Appearance and Integrity	Construction of the well pads and access roads will directly impact 15 acres. Natural Appearance within the cherry stems will be modified to a degree and the area will no longer appear to be affected by the forces of nature alone, an oil and gas footprint will be evident and obvious to the casual observer. The Natural Integrity of the IRA will not be significantly affected by implementation of the proposed action. However, the opportunity to introduce or spread noxious weeds in the cherry stems does pose a possible threat to the native grasslands. Ongoing biological control of noxious weeds provides a potential positive influence on the appearance and integrity of the IRA.	Natural Appearance and Integrity are mostly intact. Existing two-track roads, fences, stock water developments, and the presence of livestock in the IRA detract from the appearance of the area. The presence of noxious weeds in the analysis area is a potential threat to integrity of native prairie located in the IRA. Ongoing biological control provides a potential positive influence on the appearance and integrity of the IRA.
Challenge	Construction of high standard roads will provide year-round access to areas in the northern and central portions of the IRA. Within the cherry stems the opportunity to test outdoor skills and self-reliance are diminished because there is a ready means of mitigating the natural challenges present. Help or a means of access to help is close at hand in the form of accessible roads and road users. The challenge associated with the remainder of the IRA would not be significantly affected by the proposed action.	Challenge is adversely affected to a degree by the existing two-track roads, fences and stock water developments in the IRA.

Table S2. Continued

Roadless Characteristic	Alternative 1 – Proposed Action	Alternative 2 – No Action
Recreational Opportunity	The new roads will provide year-round access into the IRA for recreational activities such as hunting, sight seeing, and driving for pleasure. The Recreation Opportunity Spectrum (ROS) for the IRA would remain Semi-Primitive Motorized (SPM), however, in the cherry stems the ROS setting would move more towards a Roaded Natural setting.	The IRA would continue to provide semi-primitive motorized recreational opportunities.
Unique Characteristics	The scenic nature of the IRA as a whole would not change significantly with the introduction of the proposed wells. The IRA would retain a Scenic Integrity Level (SIL) of moderate, however, in the cherry stems it would drop a class to Low.	The scenic quality of the IRA would be maintained. It would continue to be affected by the existing two-track road system, and range improvements.
Outdoor Education	Within the cherry stems opportunities to study native plants and animals still exist but they are mitigated by the presence of the oil and gas development. Effects to this roadless characteristic are primarily confined to sections 4 and 21.	Existing outdoor education opportunities would be maintained.
Size and Shape	The proposed action has no effect on this roadless characteristic	Same as Alternative 1
Manageable Boundaries	The proposed action has no effect on this roadless characteristic	Same As alternative 1
Noxious weeds	Alternative 1 – Proposed Action	Alternative 2 – No Action
	<p>There is opportunity to spread noxious weeds near the proposed 23-21 well site due to existing infestation in the area. There are no noxious weeds at the proposed 32-4 well site or access road.</p> <p>Potential noxious weed impacts would be mitigated through application of COA's, and design criteria.</p>	Current infestations of noxious weeds, near the Equity 23-21 well site, will continue to be treated through the Medora Districts noxious weed control program. New noxious weeds populations will likely be discovered. Biological and herbicide application will reduce the existing acreage of noxious weeds but will not totally eradicate noxious weeds, notably leafy spurge. The Equity 32-4 site would likely remain noxious weed free.

Errata

Equity Oil Company Federal 32-4 and 23-21 Oil and Gas Wells Surface Use Plan of Operations

Final Environmental Impact Statement

Page Number	Correction/Change
Chapter 1, col. 1, p. 1-5, paragraph 1	<i>Should read:</i> Company gained oil and gas mineral rights for Section 4 and 21, T143N, R103W.
Chapter 1, col. 2 p. 1-5, paragraph 5	<i>Should read:</i> The Forest Service also proposes to approve the request for a NSO stipulation waiver for federal lease NDM 89514 which contains the 32-4 well.
Chapter 1, p. 1-11, col. 1, paragraph 2	<i>Insert as second sentence of paragraph.</i> The analysis area is the Bell Lake Inventoried Road Area (Figure 2, Appendix A).
Chapter 1, p. 1-11, col. 2, last bullet	<i>Replace paragraph 2 with the following:</i> Oil and gas development and associated access road construction, and installation of pipelines, electric, and communication lines has occurred on the LMNG since the late 1950s. Two oil and gas wells have been drilled in the Bell Lake IRA. One well was drilled and reclaimed in Section 21, T143N, R103W. A second producing well was drilled in Section 14, T143N, R103W. This well is located about 150 feet inside the IRA.
Chapter 1, p. 1-14, col. 2, paragraph 3	<i>Should read:</i> Forest Service Specifications for Construction of Roads and Bridges, EM-7720-100, Revised August 1996. Provides the specifications for all road design, construction, maintenance, and safety. It is incorporated into the COAs.
Chapter 2, p. 2-19, col. 1, 5 th paragraph	<p><i>Replace paragraph 5 with the following:</i> The DPG LRMP identifies that the analysis area (T143N, R103W) is to be managed for two Scenic Integrity Levels (SIL). Scenic Integrity indicates the degree of intactness and wholeness of the landscape character. Human alterations can sometimes raise or maintain integrity. More often it is lowered depending on the degree of deviation from the character valued for its aesthetic appeal (USDA Forest Service Landscape Aesthetics Handbook, 1995).</p> <p>Most of the analysis area, including the Bell Lake IRA is to be managed for an SIL of low. There is a small area located along the eastern edge of the analysis area that has an SIL of moderate (DPG LRMP, Ch. 2, maps at end of chapter). Low scenic integrity refers to landscapes where the valued landscape character appears moderately altered. A moderate SIL is defined as a landscape appearing slightly altered, with any deviations visually subordinate to the landscape.</p>

Chapter 2, p. 2-21, col. 2, paragraph 4	<i>Replace first sentence with:</i> Cumulatively the proposed and RFD Scenario 1 and proposed Equity wells and access roads would affect about 30 acres.
Chapter 2, p. 2-30, col. 1, paragraph 3	<i>Replace second sentence with:</i> These streams join and feed into Beaver Creek (Figure 11, Appendix A) which is a perennial stream located in Section 5, T143N, R103W.
Chapter 2, p. 2-36, col. 1, 2nd paragraph	<i>Third sentence: Delete...</i> the Vegetative Control DN... and replace with COAs 15 and 33.
Chapter 2, p. 2-36, col. 1, 3rd paragraph	<i>Delete:</i> ...Vegetative Control DN and...
Chapter 2, p. 2-39, col. 1, bullets 2 and 3	<p><i>Replace paragraphs 2 and 3 with the following:</i></p> <ul style="list-style-type: none"> • To directionally drill the 32-4 well, the well site would have to be relocated 2,410 feet north onto private lands in Section 33 or 3,600 feet west onto private lands in Section 5. To directionally drill the 23-21 well, the well site would have to be relocated 3,848 feet north onto state lands in Section 16 or 3,850 feet east onto private lands in Section 22. <p>Currently horizontal wells are being drilled in the adjacent townships northwest and south of the Bell Lake IRA. These wells are seeking to develop the same formations as the proposed Equity wells. One well to the northwest was unsuccessful. Two wells to the south are currently being evaluated. Horizontal distance from the surface location of these wells to the bottom of the bore hole has varied from 1,500 to 3,100 feet (Bell Lake RFD, p. 7). If the two wells currently being evaluated prove to be successful, then it may be possible to drill future wells in similar zones in the area to similar or longer distances. However, there is currently not enough information and drilling successes to make this assumption.</p>
Chapter 2, p. 2-39, col. 1, last bullet	<ul style="list-style-type: none"> • <i>Replace last sentence of bullet with:</i> The 23-21 lease does not contain a total surface NSO stipulation. The 32-4 leases does, however, for reasons identified on pages 1-5 and 1-6. Equity is seeking to drop that stipulation.
Chapter 2, p. 2-39, col. 2, third bullet	<ul style="list-style-type: none"> • <i>Replace second sentence with:</i> Therefore, since the current management plan direction is being met, the need to create and negotiate a total surface NSO stipulation is not warranted.
Chapter 3, p. 3-2, col. 2, paragraph 4	<i>Replace paragraph with:</i> Currently there is one oil and gas well in the Bell lake IRA. A successful oil and gas well was drilled in Section 14, T143N, R103W. This producing well is located approximately 150 feet inside the IRA. In 2000 one unsuccessful oil and gas well was drilled in Section 21 of the IRA and reclaimed the same year. The well and access road are currently being monitored to ensure re-establishment of native vegetative cover.

	Geophysical (seismic) exploration has been conducted over the entire IRA. Federal lands adjacent to the east side of the IRA contain some of the most productive wells on the LMNG. The entire IRA is under federal oil and gas leases with the exception of approximately 320 acres of private minerals (Figure 10, Appendix A).
Chapter 3, p. 3-7, col. 1	<i>Insert between third and forth bullets:</i> A successful oil and gas well located in the SE quarter of Section 14, T143N, R103W. This well is located approximately 150 feet inside the IRA along the eastern boundary of the IRA.
Chapter 3, p. 3-8, col. 1, paragraph 1	<i>Sentence two and three should read:</i> Noxious weeds, specifically leafy spurge, may pose a threat to the integrity of the analysis area. Leafy spurge is an.....
Chapter 3, p. 3-14, col. 1, paragraph 4	<i>First sentence; Replace</i> “Roaded Natural (RN) with Semi-primitive Motorized

APPENDIX E RESPONSE TO COMMENTS

Comment: “.... Deputy Under Secretary for Natural Resources and Environment, David Tenny, Reviewing Officer for the Secretary of the Department of Agriculture, will exercise discretionary review on appeals of the Dakota Prairie Grasslands Plan. It is our hope that Mr. Tenny will move to preserve intact all IRA’s within the Little Missouri National Grassland, including the Bell Lake IRA. C-1

Response: On May 5, 2004 Mr. Tenny released his decision in a letter to Dale Bosworth, Chief of the U.S. Forest Service. In the letter Mr. Tenny stated that based upon a review of the appeal records and your decisions, I am affirming your appeal decisions with instructions regarding the Nebraska Units and the Dakota Prairie National Grassland . The instructions pertained to reducing the threat of prairie dogs encroaching onto private lands, continued cooperative rangeland management efforts, and road litigation that might result in amendment of the DPG LRMP. Mr. Tenny chose to let stand the analysis and decisions regarding IRAs on the Little Missouri National Grassland. This decision is the final administrative determination of the Department of Agriculture under 36 CFR 217.

Comment: There were several comments identifying the current litigation associated with the Conservation Final Rule, 66 FR 3244 (Roadless Rule). Some felt the proposed action ignores the on-going legal dispute associated with the Roadless Rule and that a decision should be delayed until the legal dispute is settled. Others state that the Roadless Rule clearly mandates protection of roadless areas like Bell Lake. There was also comment expressed that Conservation Rule overrides individual forest and grassland management Plans, including that of the Dakota Prairie Grasslands. C-2, C-2a, C-2b, C-2c, C-2d

Response: Under the Special Areas Roadless Area Conservation Final Rule, 66 FR 3244 (Roadless Rule), new road construction and timber harvest in inventoried roadless areas was prohibited subject to exceptions (FEIS Ch. I, p. 1-2). Specific exemptions allow for roads in conjunction with the continuation, extension, or renewal of a mineral lease on lands that are under lease as of January 12, 2001, (36 CFR 294.12(b)(7)) and for roads pursuant to reserved or outstanding rights (36 CFR 292.12(b)(3)). The leases associated with the proposed action were both issued prior to January of 2001 (FEIS, CH 1, p. 1-5). The proposed action is

consistent with the Roadless Rule signed by former Secretary of the U.S. Department of Agriculture Dan Glickman on January 12, 2001.

On July 14, 2003, the Wyoming District Court granted a permanent injunction requested in State of Wyoming v. U.S. Department of Agriculture, enjoining the Forest Service from implementing all aspects of the Roadless Area Conservation Rule. The decision is currently under appeal. Settlement of the Roadless Rule controversy is impossible to predict and to forestall this decision in hope of a quick settlement doesn't appear to be a prudent course of action.

Comment: Two comments indicated that directional drilling can be accomplished in excess of the distances indicated in the DEIS on page 2-39. C-3, C-3a

Response: Commentors identified that oil and gas wells have been drilled for long distances. This is true, the current record is a 35,000 foot horizontal well drilled by British Petroleum-Amoco in Sunbury, England. However, the ability to drill long distances is dependent on a variety of factors, including but not limited to, such things as porosity, permeability, laterally homogeneous reservoirs, subsurface depth, lithology, and economic feasibility (Bell Lake RFD, p. 7).

Currently horizontal wells are being drilled in the adjacent townships northwest and south of the Bell Lake IRA. These wells are seeking to develop the same formations as the proposed Equity wells. One well to the northwest was unsuccessful. Two wells to the south are currently being evaluated. Horizontal distance from the surface location of these wells to the bottom of the bore hole has varied from 1,500 to 3,100 feet (Bell Lake RFD, p. 7). If the two wells currently being evaluated prove to be successful, then it may be possible to drill future wells in similar zones in the area to similar or longer distances. However, there is currently not enough information and drilling successes to make this assumption.

It is important to note that regardless of whether the proposed wells could be drilled as directional or horizontal wells, the Forest Service:

- Cannot require relocation of a proposed operation that requires the operations be sited off the leasehold or requires the operator to relocate operations by more than 200 meters (Department of Interior 43 Code of Federal Regulations Section 3101.1-2).
- Has no authority to require a company to move their well sites off lease to private or state property.
- Cannot require the operator to drill a directional well when it is not required under the stipulations or terms of the oil and gas lease. (FEIS, Ch. 2, p. 2-39)

Comment: “.... it is more accurate to analyze cumulative effects according to the 2001 *Reasonably Foreseeable Development Scenario for Oil and Gas* representing a 10 to 15 year period”. C-4

Response: The 2001 Reasonably Foreseeable Development (RFD) Scenario for Oil and Gas document was a programmatic document completed for the revision of the DPG LRMP. The analysis looked at possible oil and gas development over the entire Little Missouri National Grassland. A new RFD oil and gas analysis was conducted for the Equity 32-4 and 23-21 Oil and Gas FEIS. The Bell Lake RFD focused on Township 143 North, Range 103 West which contains the proposed wells. Therefore the Bell Lake RFD used in the FEIS is a more site specific analysis than the 2001 programmatic RFD.

The Dakota Prairie Grasslands Geologist developed reasonably foreseeable oil and gas well locations, identified in the Bell Lake RFD based on historical oil and gas development information obtained from the North Dakota Geological Survey, from information supplied by companies that have done an interpretation of an existing three dimensional (3-D) seismic survey that covers the entire township, and State of North Dakota field spacing regulations (Bell Lake RFD, p. 23). Based on this information and conversations with oil industry representatives the Forest Service geologist determined that the two wells identified as the reasonably foreseeable wells was the most likely situation to occur in the next one to five years.

Oil and gas development is influenced by a number of interrelated factors including but not limited to oil and gas pricing, national economic growth, and supply and demand for petroleum products. Events over the last 25 years (boom/bust cycles, oil embargos, foreign wars, etc.) indicate that some important aspects of the petroleum and natural gas industries are inherently difficult to predict (RFD, p.7). Forecasting oil and gas development five years into the future is difficult, extending that to 10 or 15 years becomes a highly speculative exercise, the value of which is questionable.

Comment: **Several comments indicated that the Bell Lake Inventoried Roadless Area has held protected status since the Roadless Area Review and Evaluation (RARE II). C-5, C-5a, C-5b, C-5c, C5-d**

Response: The Roadless Area Review and Evaluation (RARE II) was a process used to determine which inventoried roadless areas, on National Forest System Lands, should be recommended to Congress for inclusion in the National Wilderness Preservation System, which areas should be managed for nonwilderness uses, and which areas required further planning before reasonable decisions on them could be made.

A U.S. 9th circuit appellate court ruling (California v. Block) deemed recommendations in the RARE II EIS insufficient to meet the National

Environmental Policy Act. Following this court decision, the Department of Agriculture revised its planning procedures and incorporated wilderness recommendations into its Forest and Grasslands Plans.

In 1987, as part of the Custer National Forest Management Plan (CNFP), RARE II areas were re-evaluated and identified as roadless areas (including those on the Dakota Prairie Grasslands). The Bell Lake roadless area under the CNFP ROD (pp. i., ii.) was allocated to Management Areas B&E, which emphasized management for range and minerals resources (Equity FEIS, CH 3, p3-5).

The ROD for the DPG LRMP, signed July 31, 2002, selected Modified Alternative 3 Final. Under this alternative, the Bell Lake IRA was not recommended as a potential candidate for inclusion into the national wilderness preservation system due to mineral development (NGP FEIS, Appendix C, p. C-33), and was allocated to non-wilderness prescriptions (ROD, pp. 18, 21). The IRA was assigned to Management Area (MA) 6.1 "Rangeland with Broad Resource Emphasis" (FEIS, Ch. 3, p. 3-5).

Comment : "The DEIS fails to evaluate the validity of the current roadless area boundary, and fails to adequately analyze the cumulative impacts to all wilderness characteristics". C-6

The boundaries for the Bell Lake IRA were set under the November 2000 Roadless Area Conservation FEIS. During the creation of this FEIS the public was given opportunity to provide scoping input and comment on the draft EIS. The boundaries of the Bell Lake IRA are identified on official maps, located in Washington D.C., which are part of the FEIS. Further opportunity for the public to be involved was afforded during the plan revision process for the DPG LRMP. Documentation of that analysis is located in the 2001 Northern Great Plains (NGP) FEIS, Appendix C, pp. C-28 through C-34, C-326, C-330, C-331. Also the Dakota Prairie Grasslands (DPG) Land and Resource Management Plan (LRMP) does not require that inventoried roadless area boundaries be validated. Validation of the Bell Lake IRA boundary is beyond the scope of this proposal.

The FEIS on page 3-4 provides the reasoning for the use of the eight roadless characteristics to evaluate the effect of the proposed action on roadless character. The cumulative effects to these characteristics are disclosed in Chapter 3 of the FEIS. The evaluation of these characteristics provides a sufficient analysis to determine the cumulative effect of the proposed action on the roadless character of the Bell Lake IRA.

Comment: "Given the FS's past failures to monitor water quality and wildlife population trends, as the LRMPs require, the DEIS's conclusions that development of roadless areas will not significantly impact populations of wildlife nor significantly degrade water quality are without basis". C-7

Response: The Dakota Prairie Grasslands (DPG) Land and Resource Management Plan (LRMP) was signed in July 2002. It directs that several wildlife populations be monitored, particularly Management Indicator Species (MIS). MIS for the DPG include: western prairie fringed-orchid, greater sage-grouse, sharp-tailed grouse, greater prairie-chicken, and black tailed prairie dog.

Management indicator species have been monitored as directed by the LRMP. Western prairie fringed-orchid populations are investigated annually. Occupied orchid sites are mapped and the number of plants present is estimated. Each spring, we conduct lek surveys for sharp-tailed grouse and greater prairie-chicken. We also utilize greater sage-grouse, sharp-tailed grouse, and greater prairie-chicken population data collected annually by the North Dakota Game and Fish Department. Black-tailed prairie dog colonies are mapped every three years. Data layers are available for 1997 and 2001/2002. Colonies are scheduled to be remapped in 2005. In addition, the University of North Dakota determined prairie dog density on the Little Missouri National Grassland in 2003. Study results were recently published as a graduate thesis. Details of our monitoring is provided in our Annual Monitoring Reports.

We based our analysis of the potential impact of proposed alternatives on site-specific knowledge of the project area. Data from Grassland-wide monitoring was useful in providing an ecological context for this analysis.

Field surveys were conducted and a biological evaluation written for the proposed action. The FEIS (page 2-24) and the biological evaluation (Table A-1) identify that there is no designated critical habitat for any Threatened and Endangered (T&E) species in the Bell Lake IRA. There are no known nesting or breeding T&E individuals or populations on the Medora Ranger District at this time (Wildlife Report, p. 3; BE p. A-2).

The FEIS on pages 2-27 through 2-28 addresses the MIS that occur in the analysis area. As noted on FEIS p. 2-26, sharp-tailed grouse are present, but no leks would be impacted by proposed wells or roads. Leks are the focal point for the management of sharp-tailed grouse habitat. Likewise, black-tailed prairie dogs are present in the analysis area. Proposed well and road sites, however, would avoid occupied colonies (see FEIS p. 2-26). We conducted additional analysis for the black-tailed prairie dog, as it is classified as a sensitive species, as well as an MIS. Based on the local population surveys and the extent, location, and type of proposed actions, we determined that this project would have "No Impact" on prairie dog populations (see BE p 3, FEIS pp. 2-26, 2-27). No other MIS occurs in the analysis area.

Water Quality - The FEIS, on page 2-13, identifies that the well pads and access roads are three quarters of a mile to a mile from Bell Lake and Alkali Creeks, which are intermittent streams. Though some sediment would be created by the construction of the well pads and access roads the Forest Service Hydrologist

concluded that there was no risk of delivery to either of the creeks. Because the roads and well pad sites are totally disconnected from any streams there are no direct or indirect effects to water quality or beneficial uses downstream. There will be no increase in sediment, temperature, or fecal coliform in Alkali Creek, Bell Lake Creek, Beaver Creek, or the Little Missouri River as a result of the proposed activities.

The Forest Service Hydrologist determined that based on his analysis, documented in the Watershed Report, “the applicable provisions of the Clean Water Act will be met and that the State water quality standard for sediment discharge would continue to be met “(Watershed Report, p. 12).

The EIS, on page 2-14, further states that the BLM has reviewed the drilling plans for the two wells currently proposed by Equity Oil Company in the Bell Lake area of the Little Missouri National Grassland. The wells would be drilled in compliance with all applicable BLM Onshore Orders and regulations, as well as the rules of the North Dakota Industrial Commission, Oil and Gas Division. The BLM concluded that the proposed wells would have no significant impact on groundwater resources.

Comment: **“The DEIS fails to consider the proposal’s economic costs and benefits to the owners of the land, the American taxpayer. NEPA requires such an analysis”. C-8**

Response: Economics are addressed on pages 2-33 and 2-34 of the FEIS. The FEIS notes that economic assessments are not completed for individual wells. Once an oil and gas lease has been issued the economics associated with that lease are a non-issue with the government because the holder of the lease has a right to develop minerals associated with that lease. The lease holder also bears all costs associated with the development of the lease.

The Equity FEIS tiers to the oil and gas economic analysis covered in Chapter 3 of the Northern Great Plains (NGP) FEIS, pages 3-8, 9, 12-14, 34-38, and 42-46. The NGP FEIS discusses economic dependency and diversity, which are important features of local economies that can assist managers in measuring the general health of the economy. It addresses employment and income impacts from oil and gas drilling and production. It evaluates estimated returns to the U.S. Treasury and payments to states, counties, and local governments from oil and gas lease rentals and production royalties. Economic and financial efficiency, which looks at how well invested minerals dollars produce benefits to society are also addressed.

The FEIS also tiers to the economic analysis contained in the 1991 Northern Little Missouri National Grassland Oil and Gas Leasing FEIS, pages 3-75 through 3-86.

Comment: “The FS needs to complete a Roads Analysis Process during the NEPA public involvement stage”. C-9

Response: The construction of access roads and well pads associated with the proposed action were identified in the scoping process for this proposed project. A Roads Analysis was completed for this proposal and is located in the Project File. Recommendations from the analysis are identified in the FEIS on page 2-37 and were accepted by the responsible official in the ROD, page 16.

Comment: “Development of the production facilities and any access roads or well pads should have a minimal effect on air quality provided measures are taken to minimize fugitive dust. However, operation of the well has the potential to release air contaminants capable of causing or contributing to air pollution. The owner/operator must register the wells with the Department [North Dakota Department of Health] within 90 days of completion”. C-10

Response: A Road Plan (FEIS Appendix D, p. D-12, COA #27) is required for all proposed access roads and well pads. The road plans are professionally designed and approved by professional engineers (FEIS, Ch. 1, p. 1-4), to meet Forest Service standards. If dust abatement is needed, as a part of the construction process, it is identified in the Schedule of Items, which is part of the road plan package. When roads are to be constructed near homes, businesses or high use areas, for example, dust abatement is generally a part of the road package. When roads are constructed in remote areas there is generally no dust abatement unless a special situation requires it. The proposed wells and access roads are located in remote areas and probably will not have dust abatement. Another factor that figures into dust abatement associated with this proposal is the prevailing winds, which average 12 mph and quickly dissipate dust (FEIS, Chapter 2, p. 2-5).

Impacts to air quality are addressed in the Air Quality section of the FEIS, pages 2-3 through 2-6. The North Dakota State Department of Health (NDS DH) is responsible for air quality management. The NDS DH determined that based on expected low concentrations of hydrogen sulfide and prevailing winds the proposed wells will not change existing Class II air shed status of the analysis area or the Class I air sheds associated with the Theodore Roosevelt National Park (FEIS, Chapter 2, p. 2-6).

The jurisdiction and determination for the need for Equity to register their wells lies solely with the NDS DH. Equity Oil Company is responsible for meeting air quality standards and for obtaining all of the necessary state permits.

Comment: “Care is to be taken during construction activity near any water of the state to minimize adverse effects on the receiving water. This includes minimal disturbance of banks and stream to prevent excess siltation, and the replacement and revegetation of the disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil

and grease that may reach receiving water from equipment maintenance, and/or the handling of fuel on the site. If the project will disturb more than five acres of soil, a stormwater permit may need to be obtained before construction.” C-11

Response: The proposed 32-4 and 23-21 pad locations and roads are three quarters to a mile or more from any intermittent creek. There is no risk for sediment delivery from the proposal due to the distance from the creeks (Watershed Report, p.9). There are no seeps, springs, bogs, ponds, or other water influenced areas associated with the proposed well sites or 32-4 access road. There is a small (<one tenth acre) seasonal stock pond located in a small depression approximately 200 feet below the access road to the 23-21 well site. However, the access road would not affect this seasonal water source (FEIS, p.2-13). The conclusion of the Watershed Report is that the proposed action will have no significant adverse effect on the watershed resources (FEIS, p. 2-13).

The proposed access roads and well pads are three quarters of a mile or more from the intermittent streams located in the analysis area so there is not a concern about fuel spills, grease, etc. reaching receiving water. Despite this fact the treatment of equipment fluids, leaks, spills, production fluids, etc., are covered under Condition of Approval (COA) #35 (Appendix D, p. D-14,15) which is part of the Surface Use Plan of Operations. The prevention of spills is also addressed in the FEIS, pp. 2-8, 9.

The proposed wells and access roads will disturb approximately 15 acres of ground in total. The North Dakota State Department of Health (NDS DH) will determine if a stormwater permit is needed and it is the responsibility of Equity to obtain the permit if needed.

Comment: **“The US Army Corps of engineers may require a water quality certification from this department [ND Dept. of Health] for the project if the project is subject to Section 404 permitting process. Any additional information which may be required by the US Army Corps of Engineers under the process will be considered by this department in our determination regarding the issuance of such a certification.” C-12**

Response: A Section 404 permit is generally required when water is to be crossed. The proposed 32-4 and 23-21 pad locations and roads are three quarters to a mile or more from either of the two intermittent stream that drain the analysis area (FEIS, CH. 2, page 2-13). There are no water crossings or other water influenced areas. The need for a permit is at the US Army Corps of Engineers and State’s discretion. It is the responsibility of Equity to obtain the permit if needed.

Comment: Several comments were received which indicated an opposition to further development of oil and gas. C-13, C-14

Response: The Northern Little Missouri FEIS for Oil and Gas leasing and its accompanying Record of Decision (ROD) dated October 24, 1991, determined which lands would be administratively available for leasing. The Bell Lake area was identified as being available for oil and gas leasing. The first lease in the Bell Lake IRA was issued in 1970. Figure 10 (Appendix A) in the FEIS reveals that the entire Bell Lake IRA, with the exception of approximately 320 acres of private minerals, is under federal oil and gas leases (FEIS, CH. 1, p. 1-2).

A federal oil and gas lease is a contract between the mineral owner (Federal Government also called the Lessor) and another (lessee) granting the lessee the exclusive right to drill for, mine, extract, remove and dispose of all oil and gas (except helium) in the lands described in their leases, together with the right to build and maintain necessary improvements thereupon (FEIS, CH. 1. p. 1-3).

On June 12, 2003, the Dakota Prairie Grassland Oil And Gas Leasing ROD was signed. The ROD reaffirmed that the Bell Lake IRA was available for oil and gas leasing (FEIS, CH. 3, p. 3-6).

The Dakota Prairie National Grasslands (DPG) Land and Resource Management Plan (LRMP) identifies that opportunities for oil and gas exploration and development, consistent with the Plan, will be provided (DPG LRMP, Ch 1, p.1-6). The Plan states that all valid existing oil and gas leases will be honored Standard (DPG LRMP, p. 1-12). Further, the Bell Lake IRA was allocated to MA 6.1 – Rangeland With Broad Resource Emphasis, which among other resource uses provides for oil and gas leasing and development *Guideline* (DPG LRMP, p. 3-43).

For the above identified reasons oil and gas exploration and development are likely to continue in the Bell Lake IRA and on the Little Missouri National Grassland into the foreseeable future.

Comment: “The Forest Service Handbook 1909.15 identifies classes of action requiring an EIS. Entering an Inventoried Roadless Area is one of those classes. Yet two wells were drilled in the Bell Lake IRA in the last five years, the FH #1-21 in the same Section as the #23-21, and the BTA #1B Redtail in Section 14. These wells did not require an EIS. The reason we were given was the January 12, 2001 Roadless Area Conservation Rule. As it is pointed out in this EIS one of the exceptions of this Roadless Rule is that it allows road construction in conjunction with valid existing mineral leases. The exceptions apply to leases issued on or before January 12, 2001. All leases in the Bell Lake IRA were issued before 2000.

On July 14, 2003 the Wyoming District Court granted a permanent injunction enjoining the Forest Service from implementing all aspects of the Roadless Rule. Its relevance here is diminished twofold. The rule itself allows for road building where there are valid existing rights and secondly the validity of the Roadless Rule itself is unknown. We questioned the necessity of this EIS based on these understandings. The EIS document chapter 3-4 through 3-7 reiterates our position". C-15

Response: An EIS was not completed for the above identified wells because at the time these wells were drilled the Dakota Prairie Grasslands (DPG) was still under the Custer National Forest Plan. The DPG Land Resource Management Plan (LRMP) was not signed until July of 2002. Under the Custer Plan the Bell Lake roadless area was analyzed and allocated to multiple resource management. The area was assigned to management areas B and E, which emphasized management for range and mineral resources.

The DPG LRMP also analyzed the Bell Lake area during its plan revision process and allocated it to Management Area (MA) 6.1 - Rangeland With Broad Resource Emphasis, which is a multiple resource management designation. However, the difference is that the DPG Plan identified it as an IRA and included it in the Roadless Area Conservation FEIS. The Roadless Area Conservation Rule came out of the Roadless Area Conservation analysis. Because Bell Lake is identified as an IRA, an EIS is to be completed in accordance with direction provided in FSH 1909.15.

Under the Special Areas Roadless Area Conservation Final Rule, 66 FR 3244 (Roadless Rule), new road construction and timber harvest in inventoried roadless areas was prohibited subject to exceptions. Specific exemptions allow for roads in conjunction with the continuation, extension, or renewal of a mineral lease (36 CFR 294.12(b)(7)) and for roads pursuant to reserved or outstanding rights (36 CFR 292.12(b)(3)). The rule recognizes that roads can be built for oil and gas exploration, however, the rule does not supercede the requirement to complete the appropriate level of environmental analysis under the National Environmental Policy Act.

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